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JOURNAL INFORMATION

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(Editorial policy continued on inside back cover)

Cover Photo: Northern Rough Greensnake from Greene County (see page 28)

CATESBEIANA

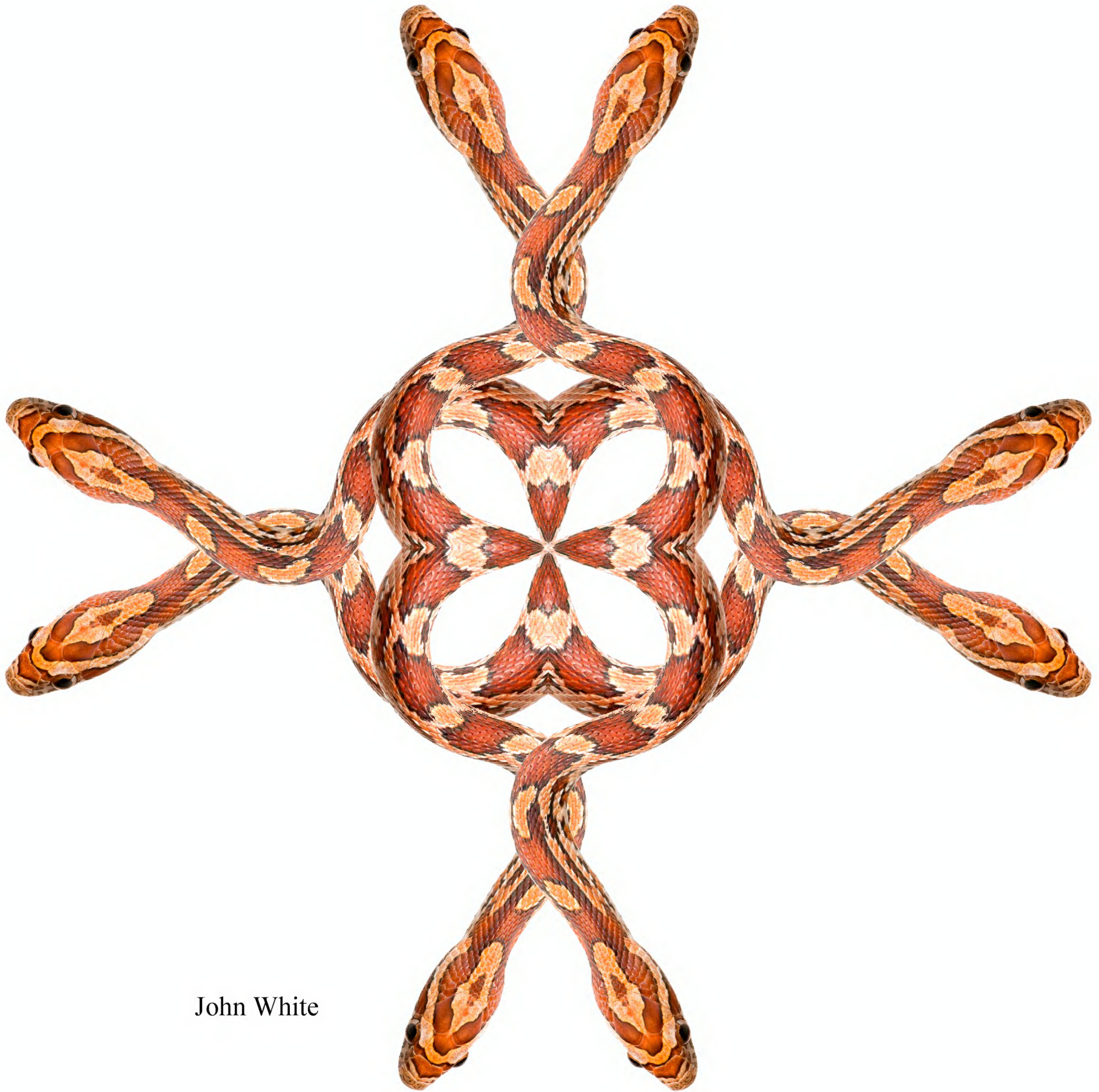
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Contents

Herpetological Survey of Prince William Forest Park, Prince William County, Virginia. Travis Anthony	3
Results of the First Annual Ferrum College Herpblitz, Franklin County, Virginia. Todd Fredericksen, Nell Fredericksen, Neil Fredericksen, Itieka Aye, Jerrick Ayers, Damon Curry, William Davis, Marco Diez Rodriguez, Chance Dillon, Laura Dymond,, Harley Foley Lily Fredericksen, Brittney Glover, Makayla Hubbard, Emma Loughrey, Nasir Mitchell, Steven Muller, Tanner Oakes, Jessica Rickman, Kaylee Riggs, Piper Scheiffele, John Sheehan, and Andrew Wring	11
Field Notes	20
President's Corner	37
Minutes of the Fall 2021 VHS Meeting	38
Treasurer's Report	40

Catesbeiana 42(1)



John White

**Herpetological Survey of Prince William Forest Park
Prince William County, Virginia
May 8th, 2021**

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Abstract

The Virginia Herpetological Society hosted a herpetological survey of Prince William Forest Park, a National Park located in Prince William County, Virginia. The purpose of this survey was to add to the information about the biodiversity of the park with known species occurrences and their abundance. Previous surveys that have taken place at the park have emphasized biodiversity of all taxa (“Bioblitz”), and there is ongoing research into stream habitats and how they are used by salamanders. For this survey, several different areas of the park were divided among volunteers. Volunteers searched for herpetofauna by flipping woody debris and rocks, dip netting vernal pools and streams, listening for calling anurans, and by chance encounter. The efforts of the volunteers yielded a total of 27 species that were captured or positively identified, including 14 amphibians and 13 reptiles. Future surveys should concentrate on the northern and central parts of the park, due to parking constraints and park activity, these areas were not heavily surveyed.

Key Words

Survey, National Park Service, Prince William Forest Park, Herpetological, Reptile, Amphibian

Introduction

The Virginia Herpetological Society (VHS) hosted a herpetological survey at Prince William Forest Park in Prince William County, Virginia. This was the first time the VHS had conducted a survey at the park. Prince William Forest Park is part of the National Park Service, which falls under federal jurisdiction in the Department of the Interior. Prince William Forest Park is approximately 6,070 hectares (15,000 acres) of primarily secondary growth forest with a variety of habitats and features, including the

North and South forks of Quantico Creek, bottomland wet forest, upland dry forest, streams, seeps, ponds, wetlands, rocky bluffs along the creeks, hilly terrain, fields, and a large amount of woody debris throughout the park. The park also includes a variety of recreational activities for people, including campgrounds, cabins, picnic areas, playground, hiking trails, and fishing ponds. The Scenic Loop road goes through the entire inner portion of the park and is frequently used by both vehicles and cyclists. The staff at Prince William Forest Park have also formed partnerships with Quantico Marine

Base, which borders the park on the west side. Regular sounds of ordinances and gunfire can be heard coming from the direction of the marine base at any given time of day. The northern and eastern portion of the park are bordered by a suburban area and Dumfries Road, a major local street, and the southern portion is bordered by privately owned land and Interstate 95.

The history of Prince William Forest Park includes industrial mining for pyrite. The mine was opened to accommodate necessary materials needed for development of supplies needed during the first World War. Shortly after the mine was closed, the government took over conservation efforts to clean up Quantico Creek and the surrounding area, and not long after the National Park Service took over management of the area. Prince William Forest Park has served as one of the Capitol Region Parks sites for wetland and tributary monitoring (Campbell et al., 2011), and park staff have kept an unofficial record of observed herpetofauna found at the park.

Mitchell and Pague (2016) previously surveyed the small mammal and amphibians of Prince William Forest Park in 1989, and in 1993 Mitchell (2015) surveyed herpetofauna and small mammals at the park again in 1993 to determine possible effects of defoliation of leaves from the invasive spongy moth (*Lymantria dispar*) on amphibian and small mammal populations.

One of the most notable observations was that of three individual Timber Rattlesnakes (*Crotalus horridus*) in 1991 (Mitchell, 1994), as breeding populations of the species were

found to be absent from this area for some time. The conclusion of this report was that these individuals were illegally translocated or abandoned into what their former owner likely concluded was suitable habitat. No individuals have been observed or confirmed at the park since.

The purpose of this survey was to confirm or add to the list of known herpetofauna found at the park. This was also a great opportunity for our organization to survey a National Park.

Survey Sites

The following is a general description of the survey areas. Portions of the park on the southern, southwestern, eastern, western, and central portions were covered during this survey. The north and northeastern portions of the park were not surveyed. A general map of the park can be found below (Figure 1). Vegetation in all areas included a canopy made up of American beech (*Fagus grandifolia*), white oak (*Quercus alba*), mockernut hickory (*Carya tomentosa*), flowering dogwood (*Cornus florida*), and tulip poplar (*Liriodendron tulipifera*). The understory was primarily made up of American holly (*Ilex opaca*). Herbaceous plants included asters (*Aster* spp.), ferns, and sedges (*Cyperaceae*). The forest floor had a layer of leaf cover and woody debris of various sizes from small limbs to downed trees.

Site-1 at 38.559829, -77.347737: The starting point for this site was the Visitor Center and lead around the area of Telegraph Road picnic area as well as north towards the south

fork of Quantico Creek. The area near the Visitor Center and picnic area consisted of

Prince William Forest Park Survey

primarily upland dry forest habitat with modest hills and lots of fallen woody debris. The trails leading towards the creek changed to wetter bottomland forest, featuring at least one dried creek with small pools of water, and led to the larger south fork of Quantico Creek, which featured large rocky outcrops, ferns, and a variety of deciduous trees.

Site-2 at 38.561083, -77.349448: The starting point for this site was near the playground and followed north along the North Valley Trail and followed the South Fork of Quantico Creek east towards the Pyrite Mine Road. The area near the playground consisted of upland forest habitat with modest hills and mixed hardwoods and fallen woody debris. Elevation declined towards the creek, and the habitat transitioned to wet bottomland forest with rocky outcrops and patches of ferns.

Site-3 at 38.563031, -77.360700: The starting point for this site was at Camp Cabin 3, where participants parked and walked to a nearby pond. The area consisted of wet bottomland forests with a variety of hardwood trees and wetland vegetation. The pond was located in a former recreational swimming pool and is fed by a nearby spring.

Site-4 at 38.582794, -77.373620: The starting point of this site was at the parking lot of the Turkey Run Nature Center and campground and followed the High Meadows Trail. The area consisted of upland forest habitat with deciduous and evergreen trees and some

varying elevation. The trail also led to a creek, which included wet bottomland forest habitat with patches of ferns.

Site-5 at 38.587829, -77.406891: The starting point for this site was at the Mawavi parking lot and followed the Mawavi fire road trail west along a creek. This area featured upland forest habitat as well as wet bottomland forest closer to the creek with vernal pools and a beaver pond.

Site-6 at 38.563390, -77.396519: The starting location for this site was at the parking area for the Chopawamsic Backcountry Area, located in the southwestern portion of the park. The group headed to the east side of the trail loop to the intersection with Breckenridge Rd. This section started out as an upland mixed hardwood dry upland forest with rolling hills and two small streams. The trail then descended into a swamp with mixed hardwoods growing in and along the submerged area.

The other section of this area included Breckenridge Road south to Lykes Lane, then south to Breckenridge Reservoir. This area was much flatter and had a variety of mixed hardwoods and pines. Along Lykes Lane on either side were piles of old broken pieces of blacktop from the road. There was also a sizable ditch filled with water. There was a steep terrain drop off to the reservoir.

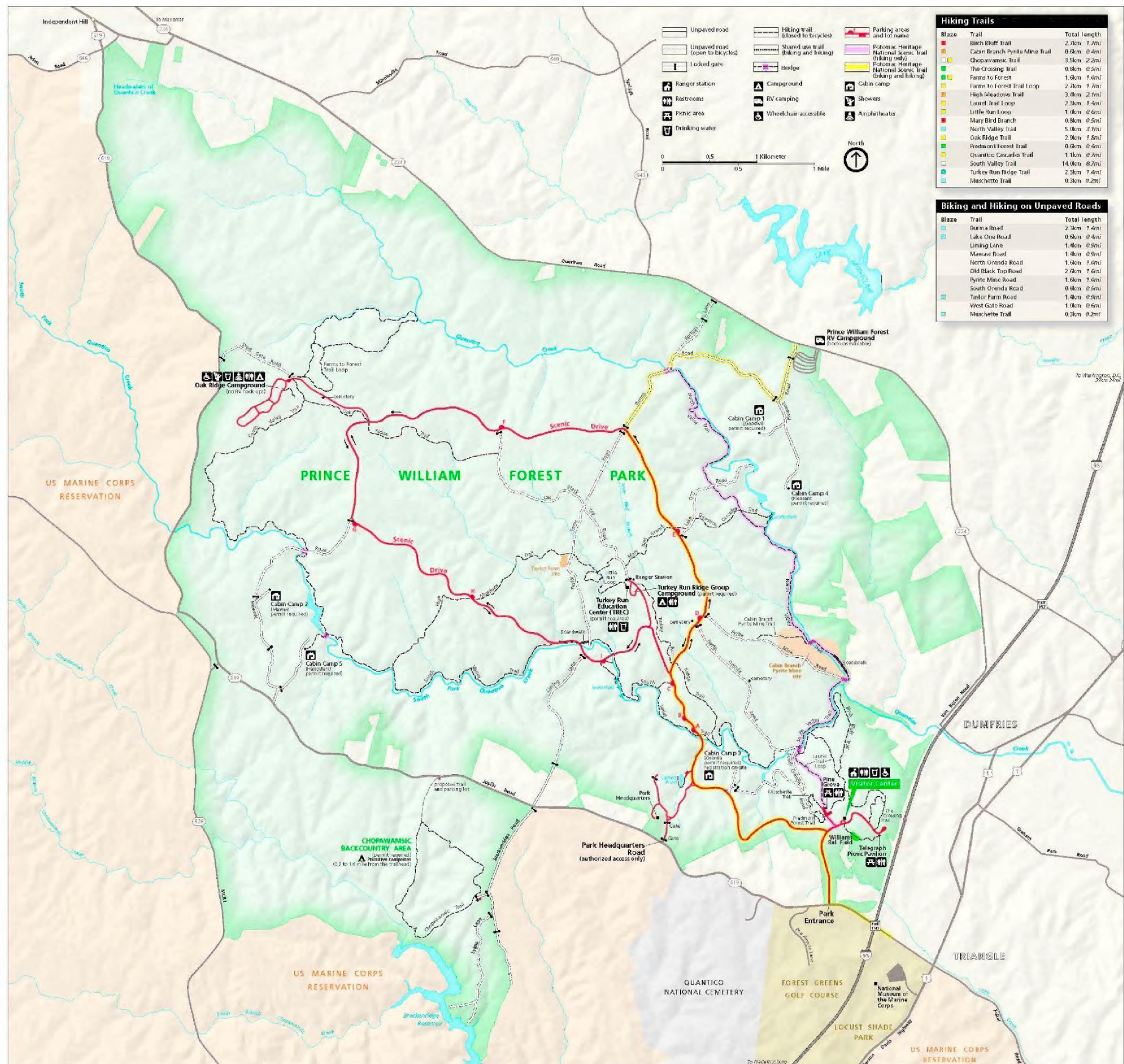


Figure 1. Park map of Prince William Forest Park

Materials and Methods

Approximately 30 volunteers participated in the survey for approximately six hours (from 08:30 to 15:30h, lunch break for 60 minutes) in the field on 08 May for a net survey total of about 180 person hours. An unknown number of volunteers did leave after surveying in the morning. Six survey groups were organized to survey six sites (described above). Weather conditions were overcast with light rain in the morning and about 12

degrees Celsius, and partly cloudy with sun in the afternoon to a high of about 19 degrees Celsius.

Prior to the survey, all participant footwear and survey gear (snake hooks, field sticks, dip nets etc.) were disinfected using a 10% bleach solution with water. Survey participants used multiple collecting methods to find amphibians and reptiles, including visual observation, listening for calling anurans, hand capture, over-turning objects

Prince William Forest Park Survey

with snake hooks and field sticks. All captured animals were observed to identify possible malformations, injuries or disease, and other unique markings and characteristics. Digital photos were taken of many of the captured animals prior to their release at the site of capture. Survey group leaders summarized and submitted all relevant data on VHS survey group data sheets.

Results

A total of 27 species were captured or positively identified, including 14 Amphibians and 13 Reptiles (Table 1). The survey produced a total of seven anuran, seven salamander, seven snake, four turtle, and two lizard species. About 262 individual animals were captured or observed and positively identified. Table 1 summarizes the results.

Annotated Checklist Amphibians

1. *Acris crepitans* (Eastern Cricket Frog) Several individuals were observed in site 5 in a bottomland forest habitat, as well as in site 6 in a stream and hopping on nearby leaf litter.
2. *Anaxyrus americanus americanus* (Eastern American Toad) One individual was observed in site 2, and one individual was observed in site 6.
3. *Anaxyrus fowleri* (Fowler's Toad) One individual was observed in site 2.
4. *Lithobates catesbeianus* (Bullfrog) Two individuals were observed, both in site 6. One was an adult observed on a log located in the water of the reservoir, and the other was a tadpole observed in the water at the same location.

Table 1. Survey Results

	Total
Class Amphibia	
Anuran Species	
<i>Acris crepitans</i>	>30
<i>Anaxyrus a. americanus</i>	2
<i>Anaxyrus fowleri</i>	1
<i>Lithobates catesbeianus</i>	2
<i>Lithobates clamitans</i>	16
<i>Lithobates palustris</i>	4
<i>Lithobates sylvaticus</i>	>1
Total Anurans	>56
Salamander Species	
<i>Ambystoma maculatum</i>	>10
<i>Ambystoma opacum</i>	>10
<i>Eurycea bislineata</i>	1
<i>Notophthalmus v. viridescens</i>	>34
<i>Plethodon cinereus</i>	47
<i>Plethodon cylindraceus</i>	6
<i>Pseudotriton r. ruber</i>	2
Total Salamanders	>110
Total Amphibians	>161
Class Reptilia	
Snake Species	
<i>Carphophis a. amoenus</i>	54
<i>Coluber c. constrictor</i>	4
<i>Diadophis p. edwardsii</i>	16
<i>Nerodia s. sipedon</i>	2
<i>Pantherophis alleghaniensis</i>	2
<i>Storeria occipitomaculata</i>	1
<i>Storeria dekayi</i>	2
Total Snakes	81
Turtle species	
<i>Chelydra serpentina</i>	1
<i>Chrysemys picta</i>	2
<i>Sternotherus odoratus</i>	1
<i>Terrapene c. carolina</i>	3

Total Turtles	7
Lizard Species	
<i>Plestiodon fasciatus</i>	11
<i>Sceloporus undulatus</i>	2
Total Lizards	13
Total Reptiles	101

5. *Lithobates clamitans* (Greenfrog) At site 1, one adult was observed on a stream bank. One adult was found in site 4 in a puddle near a stream. Three adult males were heard calling around a pond in site 5. Approximately 11 calling males were heard near the reservoir in site 6.

6. *Lithobates palustris* (Pickerel Frog) At site 4, three adults were observed near a stream. One adult was captured and released in site 6 in a creek; the individual was observed to have mites.

7. *Lithobates sylvaticus* (Wood Frog) At site 2, an undetermined number of tadpoles were observed, in what is presumed to be a vernal pool or pond. In site 4, one adult was observed near a stream.

8. *Ambystoma maculatum* (Spotted Salamander) At least 10 larvae were observed in site 6 in a pool in the forest.

9. *Ambystoma opacum* (Marbled Salamander) At least 10 larvae were captured and released from a swamp in site 6.

10. *Eurycea bislineata* (Northern Two-lined Salamander) One adult was found under a log in a forest habitat in site 6.

11. *Notophthalmus v. viridescens* (Red-spotted Newt) One red eft was found in site 2, one adult was found in site 3, an adult and a red eft were found in site 4, more than 20 adults were observed in a beaver pond in site

5, and more than 10 adults were observed in the water in site 6.

12. *Plethodon cinereus* (Eastern Red-backed Salamander) This was the most common salamander species observed for this survey at the park, found in all sites except site 5. All individuals were observed under rocks or logs, and predominantly the darker phase types were observed, as well as a few individuals with the red-backed phase. In site 1, 15 individuals of various ages were observed. In site 2, 14 individuals were observed. In site 3, eight juveniles were observed. In site 4, eight individuals were observed. In site 6, two juveniles were observed.

13. *Plethodon cylindraceus* (White-spotted Slimy Salamander) Two adults were found under logs in an upland forest habitat in site 1, and four adults (one identified as a male) were found under logs in a forest habitat in site 6.

14. *Pseudotriton r. ruber* (Red Salamander) One individual was found under a log in site 4, and a neonate was found in leaf litter in a stream in site 6.

Reptiles

15. *Carphophis a. amoenus* (Eastern Wormsnake) Several individuals were found in every site surveyed at the park, mainly under logs. One individual captured and released measured at least 25.4 centimeters long.

16. *Coluber c. constrictor* (Northern Black Racer) Two individuals were observed in site 4 in the grass along the edge of a creek, one adult was observed in a field near a woodland in site 5, and one adult was observed near a forest in site 6.

17. *Diadophis p. edwardsii* (Northern Ring-necked Snake) In site 1, 13 individuals of

Prince William Forest Park Survey

varying ages were found mainly under log bark or logs on the ground. One individual was found under a log in site 3, and one adult was found under a log in a forest in site 6.

18. *Nerodia s. sipedon* (Northern Watersnake) One adult was observed on a rock near a stream in site 1, and an adult was observed in a creek in site 4.

19. *Pantherophis alleghaniensis* (Eastern Ratsnake) One adult was captured and released in site 5 on the ground near a beaver pond, one individual was observed on a log in the reservoir in site 6, and a shed skin was found in site 6.

20. *Storeria occipitomaculata* (Red-bellied Snake) One adult was found under a rock in a forest in site 1.

21. *Storeria dekayi* (Dekay's Brownsnake) One adult was found under artificial cover in site 5, and one adult was found dead of unknown causes near the reservoir in site 6.

22. *Chelydra serpentina* (Snapping Turtle) One juvenile was observed in site 5 at the bottom of a pond.

23. *Chrysemys picta* (Eastern Painted Turtle) Two individuals were observed on a log in the reservoir in site 6.

24. *Sternotherus odoratus* (Eastern Musk Turtle) One juvenile was observed in the reservoir in site 6.

25. *Terrapene c. carolina* (Woodland Box Turtle) One individual was found in site 2, one individual was observed in site 4 near ferns, and one adult male was found on a roadside near woods in site 5.

26. *Plestiodon fasciatus* (Common Five-lined Skink) One juvenile was found in an upland

forest habitat in site 1, an adult and a juvenile were found under logs in site 2 (both were regenerating their tails), five adult males were found under artificial cover in site 5, and three adults were found under logs in site 6 (one individual was regenerating its tail).

27. *Sceloporus undulatus* (Eastern Fence Lizard) One adult female was found under artificial cover in site 5, and one adult was found dead from unknown causes next to a road in site 6.

Discussion

During the survey of Prince William Forest Park, the VHS survey groups noted wide variation in the types of habitats and species found within this large area the park encompasses. Upland dry forests, lowland bottom forest, streams, vernal pools, and a variety of artificial structures offer a lot of different habitats for herpetofauna species. Yet, no species with more specialized habitat needs was found during this survey. A comparison of the unofficial inventory of observed herpetofauna species provided by park staff showed previously unaccounted for species that were found during this survey.

An ongoing project managed by the NPS is keeping track of stream habitat throughout the region and how salamanders use that habitat at different parks within the region. The main tributary that runs through the park, Quantico Creek, has had ongoing issues with water quality and has been a focus of mitigation, both within the park and upstream. A variety of recreational features within the park as well as roads will continue to be a threat to herpetofauna that inhabits the park in the form of encounters with visitors and vehicles.

There was one species with designated conservation status as defined in "Virginia's

2015 Wildlife Action Plan” published by VDGIF; *Terapene c. carolina* (Woodland Box Turtle), which has a conservation status of “Tier IIIa. High Conservation Need.” The opportunity ranking of A indicates “on the ground” species or habitat management strategies have been identified that are expected to benefit this species, at least some of which can be implemented with existing resources and have a reasonable chance of improving the species conservation status. For this species, habitat conservation and restoration are underway (open canopy forest and meadows preservation).

Mitchell (2015) found a similar list of amphibians while surveying the park for amphibian and small mammal species in 1989, and again (Mitchell and Pague, 2016) in 1993. The previous surveys for amphibians and small mammals mainly utilized drift fences and pitfall traps that were erected and periodically checked, whereas our survey relied upon chance observations by looking under woody debris, rocks, and building material as well as visual observation and dipnetting. The previous amphibian surveys by Mitchell and Pague in 1989 and 1993 did not record Fowler’s toads, which were present in our survey. These previous surveys did find three individual Three-lined salamanders (*Eurycea guttolineata*), whereas our survey did not observe this species. No Timber Rattlesnakes (*Crotalus horridus*)

Future surveys at Prince William Forest Park should concentrate on large areas that were not surveyed during this outing, specifically the area to the north and northeast of the park. This area was not surveyed due to time constraints and lack of parking near those areas for volunteers to utilize. Turtle traps or

other passive trapping techniques could also be utilized throughout the park, and surveying earlier in the breeding season would likely yield more observations of salamander and Wood Frog activity. The weather conditions were also not ideal with cool, rainy and overcast conditions throughout the day, whereas warmer and sunnier conditions would likely yield more observations of reptile activity.

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Results of the First Annual Ferrum College HerpBlitz, Franklin County, Virginia.

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Abstract: We conducted a HerpBlitz as part of the three-week Ferrum College May term Herpetology course from 5-21 May 2021. We conducted searches on a large area of the campus forests, streams, and grasslands of the 275-ha campus property in Franklin County. We did not search developed areas near academic buildings and dorms. We also used pitfall trapping at one forested site and funnel trapping for turtles on two campus ponds. We found nine amphibian species and 14 reptile species during the survey. There were a total of 178 observations, including 106 amphibians (9 frogs and 97 salamanders) and 72 reptiles (18 turtles, 32 lizards, and 22 snakes). Despite a large team (23 people), we did not find any new campus or county records.

Key Words: Herpetological Survey, Ferrum College, Franklin County, HerpBlitz

Introduction

Ferrum College is a small private college located in southwestern Franklin County, Virginia. The main college property encompasses approximately 275 ha (700 ac), which is approximately 60% forested (Figure 1). The property is at the interface between the upper Piedmont and Blue Ridge Physiographic provinces. The elevation on the main campus is \approx 400 m (1300 ft).

The Virginia Department of Wildlife Resources (VDWR) FWIS Database currently lists 31 amphibian species in Franklin County. Three species are listed as Tier IV species including the Eastern Spadefoot (*Scaphiopus holbrookii*), Eastern Mud Salamander (*Pseudotriton m. montanus*), and Blue Ridge Dusky Salamander (*Desmognathus orestes*). Two county records were recorded near Chapman Pond at Ferrum College, including the

Eastern Spadefoot (Fredericksen, 2012) and Eastern Narrow-mouthed Toad (*Gastrophryne carolinensis*) (Fredericksen et al., 2007).

The FWIS Database currently lists 35 reptiles in Franklin County. The Bog Turtle (*Clemmys muhlenbergii*) is listed as endangered in Virginia and threatened nationally. Tier III species include the Smooth Greensnake (*Opheodrys vernalis*) and the Woodland Box Turtle (*Terrapene c. carolina*). Tier IV species include the Timber Rattlesnake (*Crotalus horridus*), Northern Scarletsake (*Cemophora coccinea copei*), Eastern Hog-nosed Snake (*Heterodon platirhinos*), Queen Snake (*Regina septemvittata*), Southeastern Crowned Snake (*Tantilla coronata*), Common Ribbonsnake (*Thamnophis s. saurita*), and Snapping Turtle (*Chelydra serpentina*).

In May 2021, a three-week herpetology course was held for Ferrum College students. Twenty students were enrolled in the course and there were three instructors. A large component of the course was to survey the major terrestrial and aquatic habitats on campus for amphibian and reptile species (a “herp blitz”). Organized searches for amphibian and reptile species were carried out during the course in different areas of the campus that had the main terrestrial habitats and streams. Searches including looking under cover objects (e.g., logs and rocks), scanning for herps aboveground, and listening for calls of frogs and toads. We also used some live trapping, including pitfall traps for terrestrial species and funnel net trapping for turtles in the two major campus ponds.

Survey Sites

Site 1. Adams Pond is a small (≈ 1 ha) embankment pond near the center of campus. It is surrounded by scattered deciduous trees and shrubs but is mostly lined by grasses. The pond is highly eutrophic, enriched with runoff from Ferrum Mountain Creek and feces by a large population of geese and ducks.

Site 2. Chapman Pond is a smaller (≈ 0.5 ha) embankment pond on the west side of campus. It is almost completely surrounded by pine or deciduous forests and Smooth Alder. It is eutrophic, but less so than Adams Pond because it is fed by a small intermittent stream and is only occasionally visited by waterfowl.

Site 3. Chapman Forest flanks Chapman Pond on three sides and includes a 58-year-old Loblolly Pine plantation and a larger area of natural mixed pine-hardwood forest dominated by Tulip Tree, Red Maple, Sourwood, White Pine, Virginia Pine and

various Oak species. The hardwood forest contains one block of a study dealing with the effects of woody debris manipulation on small vertebrate and invertebrate species described in Fredericksen et al. (2010). Pitfall trap arrays with drift fences were used in our survey and will be described in more detail in the methods section.

Site 4. Turtle Valley is a large tract of mature forest dominated by Tulip Trees on the northern side of the college named by the first author after the relatively large number of Box Turtles found there. The valley is surrounded on two sides by steep slopes that were also partially surveyed. On the eastern side of the valley is a power line corridor that separates the mature forest from a young (12-year-old) White Pine plantation. The power line corridor was surveyed, but the white pine plantation was not because the understory was difficult to penetrate because of thick understory growth with Blackberry and Greenbrier.

Site 5. East Campus includes a small wetland below a small embankment pond for cattle watering and its associated pasture. There is also a practice golf course (two holes) which was somewhat overgrown at the time of the survey. A large part of this site includes a natural mixed White Pine-Hardwood Forest on gentle to moderate slopes with a small creek (called Moonshine Creek by the students). It also contains an old, abandoned home site with only the chimney and stone foundation remaining.

Site 6. Ferrum Mountain Creek runs through campus on each side of Adams Pond and is surrounded on the south side of the pond by a small arboretum and on the north side by a 58-year-old pine plantation, established at the same time as the one at Chapman Pond.

Ferrum College HerpBlitz

Site 7. Blue Ridge Farm Museum is an historic reconstruction of farm buildings and cabins, bordered throughout with split rail fences. Adjacent to the farm is Story Creek, the largest creek on campus. It was also surveyed as part of this site.

Site 8. Ferrum Mountain is the highest elevation on campus at ≈ 600 m (1900 ft). The site is dominated by mature Chestnut Oak, Scarlet Oak and White Pine. Slopes are steep (20-30%) on the sides of the mountain. The site has a large amount of rock cover.

Site 9. Ropes Course is a ridge on the south side of campus across Route 40 that is used for the outdoor recreation program. It is dominated by Chestnut and Scarlet Oak with a sparse understory.

Site 10. White Pine plantation is a 30-year-old planting that has been invaded by Loblolly and Virginia Pine that is located on the southwestern side of the maintenance facility on the north side of campus. It has a sparse understory.

Site 11. Ferrum Nature Trail includes most of the outdoor recreation trails on the northern side of Chapman Forest. It is a mature mixed White Pine-Hardwood Forest.

Site 12. Titmus Agricultural Center is an 80-acre teaching farm off the main campus located west of Ferrum Elementary School. It mostly includes pastures for animals, but also has a small, forested wetland and a hardwood forest boundary that includes an ephemeral stream.



Figure 1. Google Earth photo of the Ferrum College campus and approximate location of survey sites.

Materials and Methods

The HerpBlitz occurred during a three-week course (ESC 390 – Herpetology) held at Ferrum College in May 2021. The course included two instructors, a teaching assistant and twenty students (Figure 2). The survey included most of the college property but did not include a search of developed areas around academic buildings, athletic fields and dormitories. In addition, there were 2.5 ha of young pine plantation that were not surveyed because it was difficult to access due to a thick and thorny understory.

There are two main embankment ponds on the campus, Adams Pond, which is located near the center of campus and Chapman Pond, located on the west end of campus. There is also a small cattle watering pond in a pasture on the east end of campus. Ferrum Mountain Creek runs through the center of campus into and out of Adams Pond and feeds into Story Creek on the south side of Highway 40. The ponds were two study sites on a regional collaborative project of pond turtles (Bowne et al. 2018) and have been sampled each year using baited funnel traps since 2014. We sampled Adams Pond for three consecutive days using four funnel traps baited with sardines and we sampled Chapman Pond for two consecutive days with four traps that were baited with either canned cat food or sardines. We also saw or heard frog species along the border of these ponds and included them in the survey.

The Chapman Forest site included daily sampling of pitfall traps from May 5-20 for amphibians and reptiles. The site included

three drift fence – pitfall arrays with five pitfall traps per array. Pitfall traps consisted of 5-gallon buckets buried in the ground so that the bucket rim was even with the ground. Lids were elevated above the buckets so as to allow captures, but also provide shade for captured animals. Pitfall arrays were in the form of a plus sign with one bucket at the center and one at each end of the 6-m silt fences connecting the pitfalls.

Except for the pond and pitfall sampling described above, all other sites (including the Chapman Forest site) were sampled for two hours during one day by the Herpblitz team. The team included 23 surveyors, although some sites had only 21 or 22 due to absences. During the two-hour searches, surveyors visually scanned the area for herpetofauna and listened for anuran calls. They also searched under rocks, logs, and other cover objects. If individuals were captured, they were usually photographed, and many were recorded on the Herp Mapper phone application.

Results

The survey yielded a total of 178 observations, including 106 amphibians (9 frogs and 97 salamanders) and 72 reptiles (18 turtles, 32 lizards, and 22 snakes) (Table 1). We found nine amphibian species and 14 reptile species. An annotated checklist follows the description.

Ferrum College HerpBlitz

Table 1. Summary of number of amphibians and reptiles observed at each site at Ferrum College. Note that sites 1 and 2 (Adams Pond and Chapman Pond) including aquatic turtle trapping and that site 3 (Chapman Forest) included pitfall trapping.

Species/Site	1	2	3	4	5	6	7	8	9	10	11	12
Amphibians												
<i>Hyla versicolor</i>					1							
<i>Lithobates catesbeianus</i>	1	2			1							
<i>Lithobates clamitans</i>	1	2			1							
<i>Desmognathus fuscus</i> and <i>D. monticola</i>				32	4	15	17					3
<i>Eurycea cirrigera</i>				1			5					
<i>Notophthalmus v.</i> <i>viridescens</i>		1	1							1	1	
<i>Plethodon cylindraceus</i>			3		6			2			3	
<i>Pseudotriton r. ruber</i>					2							
Reptiles												
<i>Chelydra serpentina</i>	2											
<i>Chrysemys p. picta</i>	2	5										
<i>Terrapene c. carolina</i>				2				1		3	3	
<i>Plestiodon fasciatus</i>			2	1	2		3				1	11
<i>Sceloporus undulatus</i>				1	2							
<i>Scincella lateralis</i>			1	2				3			3	
<i>Agkistrodon contortrix</i>						2						
<i>Carphophis a. amoenus</i>					3			8			1	
<i>Diadophis punctatus</i> <i>edwardsii</i>								1				
<i>Nerodia s. sipedon</i>						1						
<i>Pantherophis</i> <i>allegghaniensis</i>					1	1						
<i>Storeria occipitomaculata</i>								1				
<i>Thamnophis s. sirtalis</i>	1											
<i>Virginia v. valeriae</i>								2				
TOTAL	7	10	7	39	23	19	25	18	0	4	12	14

Annotated Checklist

Amphibians

1. *Hyla versicolor* (Gray Treefrog)
One individual was heard calling in the late afternoon at the East Campus site.

2. *Lithobates catesbeianus* (American Bullfrog)
Four individuals calling from the three ponds on campus during surveys.

3. *Lithobates clamitans* (Green Frog)
Four individuals calling from the three ponds on campus during surveys.

4. *Desmognathus fuscus* (Northern Dusky Salamander)

Commonly observed along streams on several sites. We were able to identify the species from captured adults, but observed and escaped individuals and juveniles were difficult to distinguish from Seal Salamanders and therefore the counts of the two species were combined in Table 1.



5. *Desmognathus monticola* (Seal Salamander)

Several adults observed, but younger individuals and escapes were included with Northern Dusky Salamanders.



6. *Eurycea cirrigera* (Southern Two-lined Salamander)

This species was found under rocks at two of the larger streams on campus, Story Creek and Moonshine Creek.

7. *Notophthalmus v. viridescens* (Red-spotted Newt)

Only juveniles (efts) were observed. We found them at three sites, all under logs.

8. *Plethodon cylindraceus* (White-spotted Slimy Salamander)

White-spotted Slimy Salamanders were found under rocks and logs at four moist forest sites.

9. *Pseudotriton r. ruber* (Northern Red Salamander)

Two Northern Red Salamanders were found under logs in moist forest on the East Campus site.

Reptiles

10. *Chelydra serpentina* (Snapping Turtle)

Two individuals were captured in funnel nets set in Adams Pond (May 11 and 12).

11. *Chrysemys p. picta* (Eastern Painted Turtle)

Two individuals were captured in funnel nets set in Adams Pond (May 11 and 12). Five individuals were captured in funnel nets set in Chapman Pond (May 19).

12. *Terrapene c. carolina* (Woodland Box Turtle)

The sites with the most box turtles were found on the Ferrum Nature Trail site and the 30-year-old pine plantation. Only one turtle was found in Turtle Valley. We found several shells of dead turtles in various states of decay, but these were not counted as part of the survey.

13. *Plestiodon fasciatus* (Common Five-lined Skink)

This species was the most widespread among the terrestrial sites and was particularly common at the Blue Ridge Farm Museum. Many individuals were found on the wooded buildings and wooded fences at this site.

14. *Sceloporus undulatus* (Eastern Fence Lizard)

Ferrum College HerpBlitz

One juvenile was found basking on a log at the Turtle Valley site and two adults were found on the chimney at the old home site at East Campus.

15. *Scincella lateralis* (Little Brown Skink)
This species was found at four sites under rocks or logs.

16. *Agkistrodon contortrix* (Eastern Copperhead)
Two adults were found near a small liner pond in the arboretum at the Ferrum Mountain Creek site.

17. *Carphophis a. amoenus* (Eastern Wormsnake)
Eastern Wormsnakes were found at three sites and was particularly common on Ferrum Mountain under rocks and logs.

18. *Diadophis punctatus edwardsii* (Northern Ring-necked Snake)
One individual found under a rock on Ferrum Mountain.

19. *Nerodia s. sipedon* (Northern Watersnake)
One adult was found on the spillway from Adams Pond leading to Ferrum Mountain Creek.

20. *Pantherophis alleghaniensis* (Eastern Ratsnake)
One individual was found inside a bluebird box at the Ferrum Mountain Creek site. Another was seen, but not captured, in the grassy area of the golf course at the East Campus site.

21. *Storeria occipitomaculata* (Red-bellied Snake)
One individual was found under a rock on Ferrum Mountain.

22. *Thamnophis s. sirtalis* (Eastern Gartersnake)

We found one recently killed snake (cause unknown) along the shoreline of Adams Pond.

23. *Virginia v. valeriae* (Eastern Smooth Earthsnake)
Two Eastern Smooth Earthsnakes were found under rocks on Ferrum Mountain.



Discussion

The HerpBlitz at Ferrum College was an alternative field component for our usual May term herpetology course where we would travel to different off-campus sites in Franklin and adjoining counties. The Covid pandemic prevented such travel, so we constrained our searches to the Ferrum College property. We hope that this campus HerpBlitz could be used as a model for other such surveys on other college campuses.

Although we found 23 species of herpetofauna through searches and trapping, we did not find any new campus or county records. We also did not find some very common species on campus, including common anurans such as the Eastern American Toad (*Anaxyrus a. americanus*), Pickerel Frog (*Lithobates palustris*), and Spring Peeper (*Pseudacris crucifer*). All three of these species were captured in a three-year study using pitfall traps along the border of Chapman Pond (Fredericksen et al. 2014). One reason for missing these species is that the peak of their breeding season had passed. All three species were observed

calling in March and April 2021 on campus. Another reason was that weather during the survey period was relatively cool and dry. Rainfall during the survey period only amounted to 0.23 cm (0.09 in). The cool weather also likely resulted in less surface activity of snakes, lizards, and box turtles; the high number of *Plestiodon fasciatus* on basking sites at the Blue Ridge Farm Museum being an exception. Efts of *Notophthalmus viridescens* were not observed on the surface, but only found under cover objects.

Trapping pond turtles yielded the two most common species in the campus ponds including, *Chelydra serpentina* and *Chrysemys picta*. We did not capture *Sternotherus odoratus* (Eastern Musk Turtle), although we did capture it in the past in both ponds as part of a collaborative study among colleges in the eastern U.S. (Bowne et al. 2018).

Virginia v. valeriae was a target species for this survey because it has only been found near the summit of Ferrum Mountain on campus (Fredericksen et al. 2006). We found

two individuals near the summit, but did not find them at any other sites. Ferrum Mountain also had three other common small snakes including *Diadophis punctatus edwardsii*, *Carphophis a. amoenus*, and *Storeria occipitomaculata*.

Another target species was *Tantilla coronata*. This small snake has not yet been observed on campus property but was discovered as a new Franklin County record at the Grassy Hill Nature Area Preserve near Rocky Mount in the Ferrum 2019 herpetology course (Smith et al. 2019). We were not successful in finding this species during the current survey.

Terrapene c. carolina has been monitored in a mark-recapture study on the college and a nearby property since 2006 (Fredericksen 2019). A total of 247 individual turtles have been marked so far. Our HerpBlitz yielded nine turtles and eight of them were new captures. The larger survey of the entire campus using a large number of individuals perhaps accounts for the high proportion of new captures.

Acknowledgements

Collections and handling were made stipulations of a scientific collection permit (#068686, Todd Fredericksen) from the Virginia Department of Wildlife Resources.



Figure 2. The Ferrum Herpetology Class, May 2021 at Adams Pond. Not pictured is the photographer, Neil Fredericksen.

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Field Notes

***Acris crepitans* (Eastern Cricket Frog):**

VA: Patrick County, Mountain Loop Lake/Private Property (36.62082N, 80.18202W), 5 May 2022, Burgundy S. Morgan, Wylie A. Martin, Jason L. Worley, and Jason D. Gibson

County Record: The Eastern Cricket Frog is distributed from southern New York southward to extreme western Florida with its western range ending at the eastern side of the Mississippi River (Dodd, C.K. 2013. *Frogs of the United States and Canada*, John Hopkins Univ. Press. 982 pp). According to the current distribution map located on the Virginia Herpetological Society (VHS) website, the Eastern Cricket Frog is highly concentrated in numerous Piedmont and Coastal Plain counties of the state. There are also records indicating the presence of the species in the northern counties of the Blue Ridge and Ridge and Valley regions of Virginia; however, the species has not yet been identified any further west than Montgomery County.

This field note represents what we believe is the first sighting of the Eastern Cricket Frog in Patrick County, where no previous record or data exists according to literature reviewed on Vertnet.org, VaFWIS database, Mitchell and Reay (1999. *An Atlas of Amphibians and Reptiles in Virginia*. Special Publication No. 1. Virginia Department of Game and Inland Fisheries, Richmond, VA. 27 pp.), Tobey (1985. *Virginia's Amphibians and Reptiles: A distributional survey*. Virginia Herpetological Society 56 pp.), and the amphibian collections at the Virginia Museum of Natural History.

On the morning of 5 May 2022, a field survey was conducted in Patrick County on private property owned by Bobby and Julie Meador, where multiple observations of the Eastern Cricket Frog were made along the edges and in the shallows of a man-made lake. The presence of the Eastern Cricket Frog in Patrick County extends the western range of this species along the southern border of Virginia 16 km from a previously documented site in Henry County near Spencer. The presence of the Eastern Cricket Frog at this site in Patrick County should encourage further surveys in more western sites suitable for this species in Patrick County and in southeastern Carroll County. It appears the Southern Blue Ridge Mountains may have been a dispersal barrier to this species in this part of the state, as there are no vouchered records of this species being found in the Southern Blue Ridge or in any county west of Franklin and Patrick Counties (excluding Montgomery County, see below). This species should also be sought in Roanoke County, where the Roanoke River cuts a gap in the Blue Ridge, thus providing a potential dispersion corridor into the great valley and further points west. If the presence of this species in Blacksburg is natural and not an introduction, then a tributary of the North Fork Roanoke River was the likely distribution corridor used by this species to invade the area. Other Eastern Cricket Frog sites located in Montgomery County would be noteworthy. A digital photograph has been deposited in the VHS Digital Archive (#658) to voucher this new county record.

**Burgundy S. Morgan, Wylie A. Martin,
Jason L. Worley, and Jason D. Gibson**

Patrick & Henry Community College
645 Patriot Avenue
Martinsville, VA 24112



***Acris crepitans* (Eastern Cricket Frog):** Northumberland County, Coopers Landing Road, Heathsville (37.87778°N, 76.42184° W). 22 April 2022. Nancy Buchholz.

County Record: The Eastern Cricket Frog has a widespread distribution in Virginia, occurring throughout the eastern two-thirds of the state. They are typically found around the shore of ponds and streams, often in high abundance. On 22 April 2022 I was working in my garden when a frog hopped out of the garden then back again. The location is about a half mile from the Great Wicomico River. The property is surrounded by loblolly pines and a variety of native trees and plants. Bordering the far edges of the property are two small streams and wetlands. A digital photograph sent to the VHS Herp ID service identified the frog as an Eastern Cricket Frog, which had not been previously verified for Northumberland County. It is found in all the surrounding counties, so this record fills a gap in its distribution. A digital photo was submitted to the VHS Archive (#650) as a voucher.

Nancy Buchholz
Coopers Landing Road, Heathsville



***Hyla cinerea* (Green Treefrog):** VA. City of Norfolk, Baldwin Ave, between Hampton Blvd and Colley Ave. 24 April 2022. Justin Maynard.

New City Record: The Green Treefrog has a wide distribution in eastern Virginia, occurring in every county in the eastern third of the state, with the exception of Nottoway. It has not yet been verified in a number of cities, the most notable of these being Norfolk. Here I report the first instance of a Green Treefrog in the City of Norfolk. I was in my backyard looking after my bog plants that sit in a tray of water when I happened to notice a green frog roughly 1.5 inches long sitting on the side of one of the planters. I took a picture and left it alone. When the photo was submitted to the VHS Herp ID website, it was identified as the Green Treefrog.

According to the FWIS Database, the only amphibians verified in the City of Norfolk are the Southern Toad, Cope's Gray Treefrog, and the Red-backed Salamander. Thus, little herpetology has been done within the city limits and there are probably many additional

records waiting to be verified. The digital photo was submitted to the VHS Archive (# 653) as a voucher.

Justin Maynard
Norfolk, VA



***Hyla squirella* (Squirrel Treefrog):** VA. Mathews County, Port Haywood, 1361 Potato Neck Road. 28 May 2022. Grace Hanners.

County Record: The Squirrel Treefrog is relatively prevalent in the southeastern portion of Virginia where all the known records occur (VHS Website). There is, however, no verified record for Mathews County. I heard treefrogs calling on the evening of 28 May 2022 and sent a digital photo and digital sound recording of the call to the VHS Herp Identification Service and was informed my treefrogs were Squirrel Treefrogs. Furthermore, that there was no record of Squirrel Treefrogs for Mathews County, so this is the first verified observation for the county. There is a record from Gloucester County to the west but not Middlesex County to the north. I submitted

the digital photo and call recording (Archive #657) as a voucher for this observation.

Grace Hanners
Port Haywood, VA



***Lithobates virgatipes* (Carpenter Frog).** VA: James City County. Joint Base Langley-Eustis (Eustis) Training Area 30 (37.172895, -76.611812). 13 April 2021. Leah M. Joyce, Madaline M. Cochrane, James Carr, Tim Christensen, and Adam Priestley.

County Record: The Carpenter Frog occurs in Caroline, Hanover, King & Queen, King William, Spotsylvania and Sussex Counties, and the Cities of Chesapeake and Virginia Beach (Virginia Department of Wildlife Resources. VAFWIS, SppObs Database. Accessed: date (ex: 16 February 2022). <https://services.dwr.virginia.gov/fwis/>). On 13 April 2021, Joint Base Langley-Eustis (Eustis) natural resources staff and University of Montana researchers were conducting a vertebrate fauna survey in Training Area 30 on Joint Base Langley-Eustis (Eustis) which is located in James City

County. On/about 1045 h three adult carpenter frogs were noted by visual observation in an ephemeral pool (estimated 0.1 hectare) with 2 individuals being captured. According to the VAFWIS, and Mitchell and Reay (1999. Atlas of Amphibians and Reptiles in Virginia. Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.), this species is not documented in James City County. Training Area 30 is approximately 20 hectares consisting of predominantly hardwood forest and is segregated from the rest of the installation by Skiffes Creek. This area had not received a formal vertebrate or invertebrate fauna survey previously. Weather conditions consisted of partly cloudy skies with an air temperature of 13.9°C. Captured individuals were released back into the ephemeral pool from which they were observed. Digital photographs were submitted as vouchers (VHS Archive #647).

Timothy P. Christensen

Adam S. Priestley

James A. Carr

Natural Resources & Integrated Pest
Management Branch

Joint Base Langley-Eustis (Eustis)

Fort Eustis, Virginia

Leah M. Joyce

Madaline M. Cochran

Center for Integrated Research on the
Environment

University of Montana

Missoula, Montana



***Pseudacris crucifer* (Spring Peeper) and *Pseudacris feriarum* (Upland Chorus Frog).** VA: Clarke Co., Duke Hollow (private property), elevation 940 feet, (39.041389 N, 77.948611) W, 20 and 21 March 2021. Raymond Barbehenn.

County Record: Audio recordings (Archive #636 & 637) were made of both Spring Peepers and Upland Chorus Frogs, together in Clarke County at approximately 8:00 AM on March 21 and 22, 2021. *Pseudacris feriarum* was much less abundant than *P. crucifer*, and frequently called in the midst of the chorusing *P. crucifer*. Daily and nightly chorusing by *P. crucifer* continued at least through April. Audio recordings were also made of solitary *P. crucifer* in the woods near the pond on October 16, 2021. The spring-fed pond (constructed in 1990; Figure 1) has been the site of chorusing *P. crucifer* every spring for approximately 30 years. In a nearby stream-fed pond (constructed in 1972), *P. crucifer* have also had a long-term presence. These observations show that *P. crucifer* and *P. feriarum* have a continuous distribution across the counties of northern VA.

Raymond Barbehenn

Department of Ecology and Evolutionary
Biology

University of Michigan

Ann Arbor, Michigan (retired)

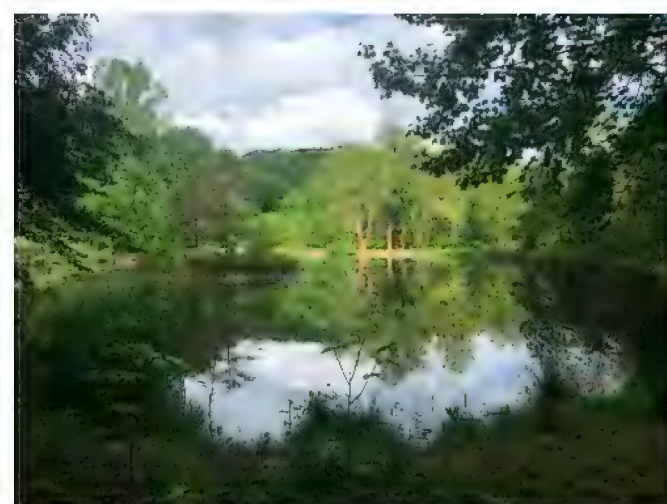


Figure 1. Spring-fed pond in Duke Hollow (Clarke Co.) in which *P. crucifer* and *P. feriarum* were calling.

***Pseudotriton ruber* (Red salamander).** VA: Montgomery Co. (37.173091, -80.409172] Montgomery Mid-County Park. 29 January 2016; 2:36 pm. Ryley C. Harris.

Behavior: Salamanders are ectothermic organisms, their body temperature and metabolism is dependent on the environment. As such, they are most active during the warmer times of the year as they require heat from the environment to bring their metabolic activity up to a level where they can be active enough to hunt prey and avoid predators. Thus, salamanders are rarely observed in winter months unless they are in waters above freezing. On 29 January 2016 I observed a single adult red salamander walking across pristine, untouched snow in upland temperate deciduous forest at Montgomery Mid-County Park, a recreational "disk golf" course. The snowpack was at least 10 inches thick. The Red Salamander then crawled down a hole in the snow created by an upward-protruding tree stem. A nearby series of channels leads to a drainage pond at Montgomery Mid-County Park, favoring a *P. ruber* colony. This behavior is atypical for *P. ruber*, which are often found dormant in small ponds during the winter months. The temperature was: 1 degree Celcius (33.8 degrees Fahrenheit); mean wind direction/ velocity: (10-12 meters above earth's surface) from the west @ 10 m/s (22.37 mph); max wind gust speed: 12 m/s or 26.84 mph; relative humidity 2 m above ground: 58%; pressure at weather station: 698.9 mmHg (0.92 atm); cloud cover: scattered clouds (40 to 50% coverage); Elevation: approx. 1200 m ASL.

The December-January temperature anomaly for 2015-2016, as compared to a 1981-2010 baseline, for the general location in Montgomery County, Virginia was +2.42°C: the largest anomaly on record and to date for the two month period. This upward deviation from baseline temperatures for the 2015-2016 winter may have acted as a phenologic cue, triggering *P. ruber* to deviate from its typical winter dormancy and emerge and traverse the snowy landscape. This observation lends to questions about the effects of increasing average global temperatures on *P. ruber* and other herp populations. Digital photographs were submitted to the VHS Archive (#640) to document the observation.

Ryley C. Harris,
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Virginia Tech
238 Wallace Hall
Blacksburg, VA 24061



***Hemidactylum scutatum* (Four-toed Salamander).** VA: Warren County, Smithsonian Conservation Biology Institute (38° 54' 0.948" N 78° 8' 51.770" W). 31 March 2022. Brooke Askew.

New County Record: The Four-toed Salamander is a striking looking salamander with its pure white venter with large black spots. Its distribution is essentially state-wide, being found in most areas within Virginia (VHS Website). There are, however, many gaps in this distribution with individual counties without a vouchered record. Here, I report the first report of Four-toed Salamanders in Warren County. This report helps fill a gap in northern Virginia since there are records from Frederick and Shenandoah Counties to the west and Page County to the south.

The specimen reported here was found while looking for red backed salamanders under rocks, logs, and other cover objects on the Smithsonian Conservation Biology Institute property near Leach Pond. The day was cloudy with slight drizzle, and a temperature around 18°C. Digital photographs were taken of the animal and submitted to the VHS Archive (#646) as a voucher.

Brooke Askew



***Carphophis amoenus* (Eastern Wormsnake):** VA. City of Emporia, Meherrin River Park (36°41'02"N 77°31'57"W). 14 May 2022. Mike Blythe.

City Record: The Eastern Wormsnake has a state-wide distribution, being documented in 86 counties and 23 cities (VHS Webpage). It is probably the most commonly encountered and numerous snake in Virginia. On 14 May 2022 Mike Blythe and I were looking for reptiles in Meherrin River Park in the City of Emporia. Mike found a small (approximately 24 cm) Eastern Wormsnake in a trash pile on the edge of the park, in the folded fabric of a discarded cushion. Since the Eastern Wormsnake has been documented in Greenville and all the counties surrounding Greenville, but not within the city limits of Emporia, I submitted a digital photograph (Archive #654) as a voucher for the city. There are likely many additional records for Emporia waiting to be reported as only the Woodland Box Turtle, Yellow-bellied Slider and Eastern Fence Lizard have so far been documented. The weather for this present observation was cloudy with a temperature of 22°C.

Amy Lehman



***Carphophis amoenus* (Eastern Wormsnake):** VA. Floyd County, Buffalo Mountain Natural Area Preserve. 17 May 2022. Jody and Tom Franko.

County Record: The Eastern Wormsnake is one of the most common snakes in Virginia. It is documented from 86 of the 95 counties in the state. The few remaining distribution gaps are in southwestern Virginia, one of these being Floyd County. Here we report an observation of the Eastern Wormsnake from Buffalo Mountain Natural Area Preserve. On 17 May 2022 Jody and Tom Franko were coming down from the summit of Buffalo Mountain when their dog drew attention to a small snake. A photo of the snake was sent to me, and I sent it to the VHS Identification Webpage to confirm the identity as the Eastern Wormsnake. With the confirmation I was notified there was no previous record of the species for Floyd County. A copy of the photo was submitted to the VHS Archive (#662) as a voucher for this observation.

Linda Gette
24 Nursery Road
Laurel Fork, VA.



***Heterodon platirhinos* (Eastern Hog-nosed Snake).** VA: Buckingham County, 1.5 km E of Curdsville (N 37.416538, W -78.439218). 31 Dec 2021. C. Michael Stinson.

Late Activity: While walking in a mixed forest near my home on the morning of 31 Dec 2021 I was surprised to see a dark snake crawling on the forest floor. After approaching it I was able to identify it as a melanistic Eastern Hog-nosed Snake (VHS Archive #639). I waved a stick near the snake, attempting to induce the well-known “playing dead” behavior of the species, but it would not roll over. It did flatten its neck and hiss at me, but did not attempt to strike. I photographed but did not handle the snake. The website of the Virginia Herpetological Society

(https://www.virginiaherpetologicalsociety.com/reptiles/snakes/eastern-hog-nosed-snake/eastern_hognose_snake.php) states that museum records for this species “indicate an activity period of 1 March-6 December, although most records are in April through early October.” My observation occurred well outside these dates, hence this report. Perhaps unsurprisingly, the weather had been mild before this sighting, with air temperature approximately 13°C at the time of observation and the temperatures the preceding 48 hours ranging from 10°C to 19°C, though by 72 hours after my sighting the temperature had dropped below 0°C, and several inches of snow fell soon afterwards. Given that this is a lone sighting of a single individual, it is nevertheless tempting to wonder whether the darker coloration of melanistic individuals might give them an advantage over other members of this species

during cooler weather by allowing them to warm more quickly in whatever sunlight is available.

C. Michael Stinson
437 Wildflower Lane
Dillwyn, VA 23936



***Liodytes rigida* (Eastern Glossy Swampsnake)** VA: Virginia Beach, Back Bay Landing Road, (36.591026, -75.998667). 28 April 2021. Myles Masterson, Kameron Burgess.

City Record: The Eastern Glossy Swampsnake is one of the rarest snakes in Virginia. The species is only known from a few observations in New Kent County just north of Charles City County, from about 30 years ago (FWIS Database). Both of these recorded localities are tributaries of the Chickahominy River. On the night of 28 April 2021 we were walking along Back Bay Landing Road where we found a roadkill Eastern Glossy Swampsnake. We suspect the snakes occur in the artificial ditches and surrounding wetlands. From the south, we have observed this species less than a kilometer from the Virginia border (6km SSE from this specimen) in Currituck County NC. Considering the contiguous

habitat, it was only a matter of time until we secured a Virginia observation. This observation represents not just a city record but also a novel region of Virginia. A digital photo was submitted to the VHS Archive (#663) as a voucher.

Myles Masterson
Suffolk, Virginia



***Opheodrys aestivus* (Northern Rough Greensnake)**: VA. Fredericksburg City, Oak Hill Cemetery. 15 May 2022. Simon Richardson.

City Record: The Northern Rough Greensnake has a state-wide distribution in Virginia being verified in 83 of the 95 counties, and 13 cities. Because of its bright green coloration, it is typically seen when on the ground rather than its normal arboreal habitat. On 15 May 2022 I was building a fence in the Oak Hill Cemetery on the east side of Fredericksburg when I turned around and saw the snake. After taking several photographs, I released the snake. The

photographs were submitted to the VHS identification web site and was told the snake was a Northern Rough Greensnake, and there was no record of it for the City of Fredericksburg. The Northern Rough Greensnake is verified for all the counties surrounding Fredericksburg, so this record fills a gap in the distribution for this species. A photo was submitted to the VHS Archive (#656) as a voucher for the observation.

Simon Richardson
Fredericksburg, VA



***Opheodrys aestivus* (Northern Rough Greensnake):** VA. Greene County, Stanardsville, Greene County Park (38.2758834, -78.4177789). 3 May 2022. Rita Swain.

County Record: The Northern Rough Greensnake has a state-wide distribution in the Commonwealth being recorded in 83 of the 95 counties. There are a few counties which have not yet been documented, scattered throughout the state, Greene

County being one of these. On 3 May 2022 my family was walking a trail in Greene County Park in Stanardsville when my 5-year-old stepped over an object thinking it was a vine, then saw it was a snake! She ran to get me and when we came back, the snake was in a tree. I took several digital photos and submitted them to the VHS (Archive #651). This record helps fill in one of the few remaining gaps in this snake's distribution.

Rita Swain
Stanardsville



***Pantherophis guttatus* (Red Cornsnake):** Brunswick County, Alberta, 2908 Old Poole Rd. 3 June 2022. Mark and Kelly McGovern.

County Record: The Red Cornsnake has a widespread distribution in Virginia, most commonly found in the central portion of the state. It is verified in 44 counties, but not Brunswick. Here we report the first record for Brunswick County. On 3 June 2022 Kelly was cleaning out the chicken and turkey coop and came across a snake. After digital photos were taken the snake was left where it was found. There was no previous record for the Red Cornsnake in Brunswick County (Mitchell, J.C. 1994. The Reptiles of Virginia. Smithsonian Institution Press,

Field Notes

Washington DC. 352pp.) so this observation helps fill a gap in the distribution for the species. One of the photos was retained as a voucher for the record (VHS Archive #660).

Mark and Kelly McGovern

Alberta, VA



***Pantherophis guttatus* (Red Cornsnake):**
VA. Essex County, 4458 Sunnyside Rd
Tappahannock. 8 November 2021. Woodie
Walker.

New County Record: Red Cornsnakes are a large and colorful animal, often prized in the pet trade. They tend to be more colorful in the southern portion of their range than in Virginia. Because they are fossorial, they are seldom observed and often overlooked. Their main diet consists of small rodents and their foraging may bring them out onto roads. They are sometimes found as road kill which may produce the only observations to verify their presence.

On 8 November 2021, an adult Red Cornsnake was found DOR in front of my property at 4458 Sunnyside Road in

Tappahannock, Virginia. Photos of the dorsum and venter of the animal were submitted (VHS Archive #642) to the VHS Identification page, and serve as a voucher for this new record for Essex County. The distribution for the Red Cornsnake is primarily central Virginia. There are no previous vouchers for Essex County in Mitchell (1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington DC. 352 pp.) nor are there for the neighboring counties of Middlesex, Richmond or King and Queen. There are records for Caroline County to the northwest and Gloucester County to the southeast, so this observation helps fill a gap in the known distribution. The observation date of 8 November also extends slightly the latest activity record for the species, from 3 November (Mitchell, Op. cit.).

Woodie Walker

4458 Sunnyside Road
Tappahannock VA



***Regina septemvittata* (Queensnake):** VA, Orange County, Lake of the Woods Way in Locust Grove. 27 May 2020. Jessica Robbins-Johnson.

County Record: The Queensnake has a wide distribution in Virginia, occurring in the western three-fourths of the Commonwealth (VHS Website). I live in Locust Grove, located in Orange County, near a private lake that houses crayfish in the rocky, man made shores. I have seen Queensnakes several times around the shores of Lake of the Woods. I photographed Queensnakes on 16 August 2019 (a baby), 27 March 2020, 27 March 2021 (one year later!) and 30 July 2021 (another baby my then 8 year old saved out of our neighborhood pool!). I here report the snake photographed on 27 May 2020 since the photograph is of an adult. All snakes were released safely, without harm, where they were found. One of the snakes was caught in some landscaping netting. A nearby fisherman lent us some scissors to cut it out, and we released the snake safely. This report is the first to document the Queensnake in Orange County. A photograph was submitted to the VHS Archive (#652) as a voucher.

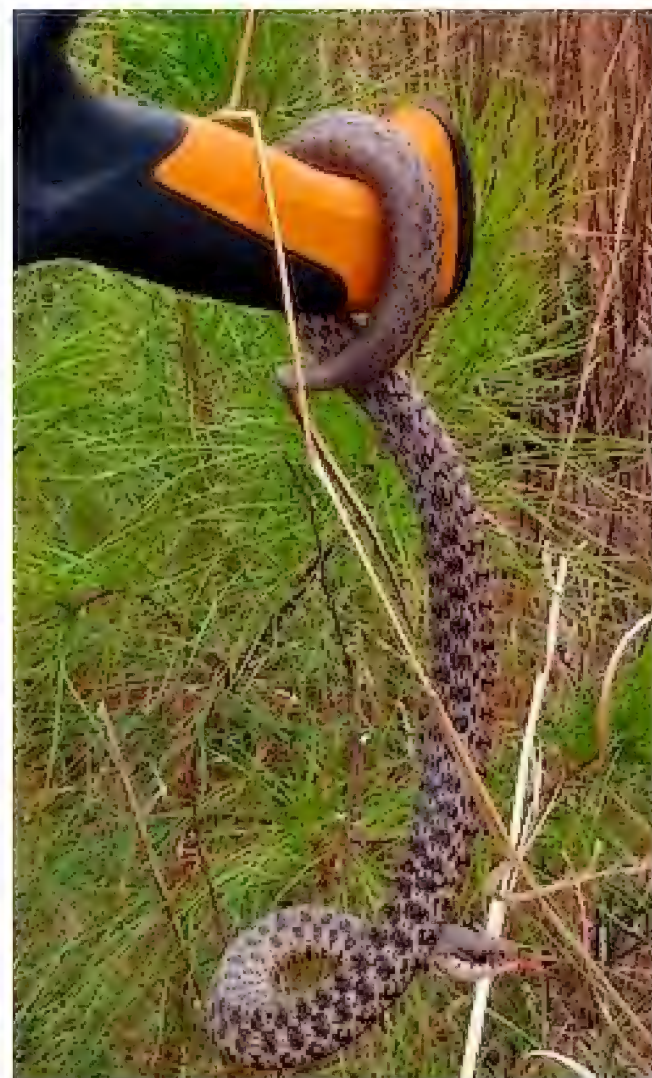
Jessica Robbins-Johnson
232 Birdie Road
Locust Grove, VA 22508



***Thamnophis sirtalis* (Gartersnake):** VA, Southampton County, 21693 Bethel Rd., Franklin, approximately 400 meters north of the road. 27 February 2022. Amy Lehman

County Record: The Eastern Gartersnake is a common species in Virginia, recorded in 83 of the 95 counties. There are few areas without a verified record. One of these is Southampton County. On 27 February 2022 I was walking around a friend's property and noticed a snake. It was in a cutover, in a relatively higher, drier part of the terrain, about 150-200 meters from a stream with wet and boggy terrain. I took a digital photograph of the snake and submitted it to the VHS Identification page (Archive #645) and was told the snake was an Eastern Gartersnake, and there was no previous record for Southampton County. The Eastern Gartersnake has been verified in all surrounding counties except Surry to the north, so this observation helps fill one of the few remaining gaps in the species distribution in Virginia. The weather was overcast and 7.8°C.

Amy Lehman



***Thamnophis sirtalis sirtalis* (Eastern Gartersnake)** VA: Prince William Co., Occoquan Bay National Wildlife Refuge (38.637732, -77.228518. 31 October 2021. Barbara J. Saffir

Reproduction: The Eastern Gartersnake, Virginia's official state snake, is viviparous. Mitchell (J.C. 1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington D.C. 352pp.) reports that mating in the Eastern Gartersnake occurs in the spring after emergence from hibernation. Gibbons (W. 2017. Snakes of the Eastern United States. University of Georgia Press, Athens GA 416pp.) states they mate primarily in the spring, although mating in the fall has been observed. A single female may be courted by many males at the same time, forming a "mating ball" (Fitch, 1980. *Thamnophis sirtalis*. Cat. Amer. Amphib. Rept. 270.1-270.4.). Mark Khosravi on his website reported a number of males courting a female in 2003 in Clifton VA ([First documented photographic evidence of Garter Snake Mating Ball | On the Trail with Mark, Mike, and Tony \(khosravi.net\)](#)). Here I report a second instance, with three Eastern Gartersnakes courting a female at the Occoquan Bay National Wildlife Refuge in Prince William County. This is the second time either a snake ball or "mini-snake ball" of Eastern Gartersnakes has been documented in the Commonwealth of Virginia. It is interesting that both instances occurred in the fall. A voucher photo (Archive #641) was taken in the afternoon on Halloween near the end of the "Easy Road Trail" at Deephole Point on Occoquan Bay at the approximate GPS coordinates of 38.637732, -77.228518.

Barbara J. Saffir
1350 Beverly Rd., Suite 115-477
McLean, VA 22101



***Virginia valeriae* (Eastern Smooth Earthsnake):** VA. Albemarle County, Gilbert Heights (38.15501, -78.39201). 29 May 2022. Richard Lindsay.

County Record: The Eastern Smooth Earthsnake has a wide distribution in Virginia. Most records are in the eastern two-thirds of the state, but there are many gaps in this distribution. One of these is Albemarle County. On 29 May 2022 Richard Lindsay was doing yard work and noticed a small snake. He sent me a digital photo which I identified as an Eastern Smooth Earthsnake. Looking on the VHS Website, I noticed there was no record of the species in Albemarle County. I sent a copy of the photograph to the VHS to document this observation (VHS Archive # 661). This record helps fill one of the many gaps in the Eastern Smooth Earthsnake distribution in Virginia.

Timothy James Burst
Ashland, Kentucky



***Apalone spinifera* (Spiny Softshell Turtle):** VA. Tazwell County, Richlands (37.093291, -81.825632). 27 May 2022. Clancey Deel.

County Record and Reproduction: Little is known of the Spiny Softshell Turtle in Virginia. Natural populations are verified in only six counties in far southwest Virginia (VHS Website). On 27 May 2022 I was birding on the Clinch River in Richlands when I spotted a turtle coming out of the river, dig a nest in the bank, lay eggs, then return to the river. This observation is the first for Tazwell County (Mitchell, J.C. 1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington DC. 352pp.). This observation also adds to the reproductive biology known for the species as Mitchell, (Op Cit.) states that egg laying occurs in June and July, with this record in late May. Digital photographs were

submitted to the VHS as a voucher (Archive #659) for this record.

Clancey Deel
Richlands, VA



***Pseudemys concinna floridana* (Coastal Plain Cooter):** VA, City of Franklin, Barrett's Landing Park on the Blackwater River adjacent to the boat ramp (36°40'25"N 76°55'01"W). 1 May 2022. Mike Blythe.

City Record: I was looking for reptiles with a fellow VHS member, Mike Blythe, at Barrett's Landing Park on the Blackwater River. Mike found the baby turtle at the shore line adjacent to the boat ramp, basking on a log. We removed it to take photos and replaced it in its original location. It was a little over an inch long and very shy, quite determined to keep its head and legs tucked in tight, so we weren't able to get better photos of the markings. Photos were submitted to animal-identification@virginiaherpetologicalsociety.com (VHS Archive #648). The weather was 26°C and mostly sunny and clear. The Coastal Cooter is documented from all the counties surrounding Franklin City so this record fills the distributional gap.

Amy Lehman



***Sternotherus odoratus* (Eastern Musk Turtle):** VA, City of Franklin, Barrett's Landing Park on the Blackwater River adjacent to the boat ramp (36°40'25"N 76°55'00"W). 1 May 2022. Mike Blythe.

City Record: I was looking for reptiles with a fellow VHS member, Mike Blythe, at Barrett's Landing Park on the Blackwater River. Mike found an Eastern Musk Turtle at the shoreline adjacent to the boat ramp, completely submerged among the rocks. We removed it to take photos and replaced it within feet of its original location. The turtle was covered in mud and algae which made it difficult to discern colors/patterns. While taking pictures of the plastron, the turtle exhibited defensive behavior and tried to bite. Photos were submitted to animal-identification@virginiaherpetologicalsociety.com (Archive #649). The Eastern Musk Turtle is documented from all the counties surrounding Franklin City, so this record fills a distributional gap.

Amy Lehman



***Plestiodon fasciatus* (Five-lined Skink)** VA: Radford City, Radford University, Hemphill Hall. (UTM 17N, 539843 E, 4110483N). 26 August 2021. Karen Powers, Robert Sheehy, Matthew Close, Brandon Crawford.

County Record: We (Powers, Crawford and Close) observed but were unsuccessful at capturing adult and juvenile skinks (genus *Plestiodon*) in 2019 and 2020 inhabiting a curated garden area called Alumni Gardens adjacent to McConnell Library, Radford University campus. The garden area contains several ornamental trees and shrubs and raised flower beds bordered by stone retaining walls. Digital photographs of skinks in the Alumni Gardens were collected by Crawford on April 26, 2020 and May 22, 2020, but the quality of the closeup image left some uncertainty in counting of the labial scales to verify the species. We further detected skinks along buildings on either side of McConnell Library (Center for the Sciences, Hemphill Hall). However, identification beyond genus was not possible until Powers discovered a desiccated skink at Hemphill Hall on 26 August 2021. A digital photograph was taken of this animal which was shared with Susan Watson (VDWR) who acknowledged that no species of *Plestiodon* had been verified in Radford City. Unable to identify beyond genus with the carcass remains, Sheehy extracted DNA from the carcass and sequenced the Folmer region of the COI gene. This specimen showed a sequence similarity of 97.1% with 7 *Plestiodon fasciatus* (Five-lined Skink) specimens in the database; this is consistent with this specimen being *Plestiodon fasciatus*. This DNA sequence has been submitted to GenBank at NCBI (Accession number TBD). The desiccated skink was kept as a voucher in the natural history collection in the Biology Department at Radford University (RU 14664).

This species is well-documented in counties throughout Virginia, including all of those adjacent to Radford City. Therefore, its discovery is not unexpected; it's likely that this species has been present in Radford City for some time, but simply had not been confirmed until now.

Karen Powers, Robert Sheehy, Matthew Close, Brandon Crawford
Radford University
Department of Biology
Radford VA 24142



Photo of live specimen (B. Crawford):

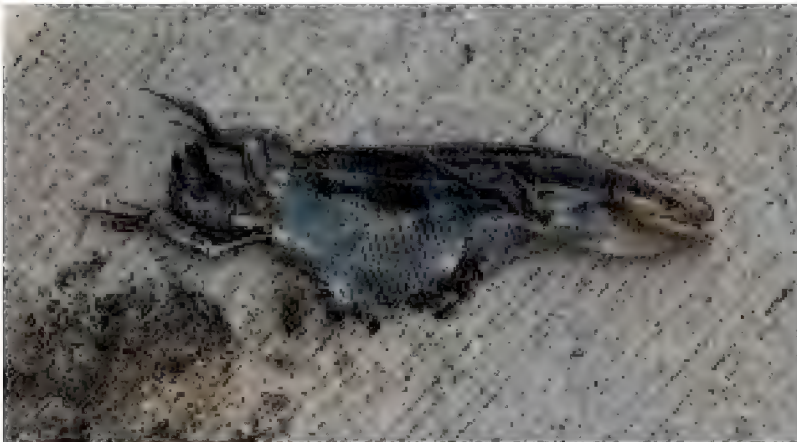


Photo of desiccated specimen (K. Powers):

***Plestiodon inexpectatus* (Southeastern Five-lined Skink).** VA: Amelia County, 16981 Arabian Dr. 27 March 2022. Josh Lutchter.

New County and Early Occurrence Records: The Southeastern Five-lined Skink is the second least common skink in Virginia. The Common Five-lined and Broad-headed Skinks are more common, and the Coal Skink is less common (VHS Webpage). Part of the scarcity of records stems from the difficulty of identifying this species as the scale rows on the underside of the tail must be examined, necessitating its capture. The specimen reported here was found while log flipping with my two sons in the woods on the edge of our yard. We weren't having much luck with logs, so we moved to some pavers and yard decorations hoping to find some reptiles warming up under them. That is when we found this skink. The day was warm with a temperature about 18°C.

The earliest record for an active Southeastern Five-lined Skink is 3 April (Mitchell, J.C. 1994. The Reptiles of Virginia. Smithsonian Institution Press, Washington DC. 352 pp.) so this record moves the first reported activity date up by a few days.

Verified records for the Southeastern Five-lined Skink occur in 33 counties, mostly in the eastern third of the state. This record is the first for Amelia County. Records exist for all the counties surrounding Amelia except Dinwiddie, so this find fills a gap in the distribution in southeastern Virginia. Digital photographs (Archive #644) were submitted to the VHS herp identification page so the identity could be verified.

Josh Lutchter
16981 Arabian Dr.
Amelia VA



***Plestiodon laticeps* (Broad-headed Skink):**
VA. Amelia County, 10 km southeast of Amelia Courthouse (N 37° 17' 37.204"; W 77° 52' 48.777"). 21 May 2022. Roslyn Clark and Chris White

County Record: The Broad-headed Skink has a wide distribution in Virginia. It is found throughout eastern and central Virginia but not in the far western counties. It is difficult to identify since scale counts on the head are needed to establish its identity apart from the Common Five-lined and Southeastern Five-lined Skinks. Since these are all arboreal lizards, they are difficult to capture or get sufficient photographs of the head to do these scale counts. On 21 May 2022 we observed a male/female pair on an oak tree in our yard. The tree borders a wooded area. We noticed movement at the base of the tree, and then looked closer to see a pair of lizards. I photographed the lizards and sent a photo to

the VHS for identification. We were told they were Broad-headed Skinks and had not been previously verified for Amelia County. They have been verified in all the surrounding counties except Dinwiddie, so this record helps fill a gap in the distribution. A digital photograph (Archive #655) was submitted as a voucher for this record.

Roslyn Clark and Chris White

Wilson's Corner

Amelia County



***Scincella lateralis* (Little Brown Skink)**

VA: Scott County: 9.34 miles WSW of Gate City, Virginia (36.61576°N, 82.74841°W). 18 December 2021. Aaron Mazuelos. (Verified by Wally Smith, Herpetologist, University of Virginia, Wise).

New county record: This specimen was found on the edge of hayfield and mixed hardwood forest habitat, beneath a piece of wood. The day was seasonally warm, the outside air temperature was 14°C. Initially, when the piece of wood was overturned, the little brown skink was on its back and

appeared to be playing dead. Once it turned onto its belly, the skink was quite active and in good condition. The darker area on the skink's tail appears to be regrowth from previous autotomy.

The area where this little brown skink was discovered is also an area that has abundant populations of five-lined skinks and northern fence lizards. Little brown skinks have been previously recorded in Lee County, Virginia, as displayed on the Virginia Herpetological Society website; however, their presence in southern Scott County extends the range of this skink eastward from the westernmost county in Virginia.

Aaron Mazuelos

Gate City, VA



President's Corner

Dear Members of the VHS,

A lot has occurred in the past six months, and many people put in exorbitant amounts of effort to develop programs and see projects come to completion. We have had a productive winter and spring with members of our education committee and the executive committee interviewing for local papers and tabling for education events. While I've tried to keep up with their accomplishments by posting photos and short summaries to our Facebook page, I know what is posted is less than half of what these wonderful people have done, and for full summaries of all our spring surveys check our website. In this issue, I will touch on only a few accomplishments as they relate to the goals outlined in my last president's corner – membership engagement and societal structure.

In my last president's corner, I mentioned wanting to expand membership involvement, and I believe we are making progress on that front with our education committee lead by Caroline Seitz. We have a robust education committee with non-executive members volunteering their time to table events and give talks. This year we also allocated funds with the intent to update materials and create education bundles for different parts of the state where committee members can coordinate regionally. New banners, table covers, and herpetology toys for hands-on learning have been purchased, and we are looking to improve further on this front as well as the training of committee members.

For many years a chronic problem in the society was automatic emails regarding payments through Paypal, and members not receiving communication about their memberships and donations. We did not have an email process set up and only one person

managing almost 500 members on an excel spreadsheet. This is an absurd amount of work, so when I and the treasurer, Matt Close, were helping our new Outreach Committee Chair, Kelly Geer, figure out the current system we all agreed there needs to be a better way, and I began looking into options. At the spring meeting, those present voted unanimously to get the bookkeeping software Little Green Light, and Kelly has made fantastic progress setting it up and is already communicating with members regarding payments and donations.

The newsletter was also geared more towards membership engagement than past issues. Our new newsletter editor, Yona Britto, did a wonderful job including coloring sheets, trivia questions, and wordsearches as well as our usual articles. I was most impressed by the care she took in finding a formatting software, communicating with contributors, and creating an art corner for membership involvement.

I hope members have seen more communication from VHS and feel that they know what impact the society is having for the conservation, education, and research of our native reptiles and amphibians. Education and communication to membership have definitely been at the forefront of my first six months of presidency, but more work needs to be done to expand conservation and research efforts as well, not to mention updating the bylaws. We are all working together to create a better natural world for herpetology and spread our joy of it to others whether that is getting involved at surveys and education events or donating to the society. Please keep up the amazing work each and every one of you do.

Sincerely,
Erin C. Anthony

Spring 2022 VHS Spring business meeting minutes
Widewater State Park, Stafford County, Virginia
11 June 2022

Members Present: Erin C. Anthony, Matt Close, Yohn Sutton, Kory Steele, Caroline Seitz, Kelly Geer (via phone chat), Travis Anthony, Emmett Lebendig, Sophie Larson and Jonathan Kerr

Committee updates:

Permits: (Susan Watson) No updates. Just keep up with permits that are needed.

Education Program committee: Proposes offering VHS logo t-shirts to members doing educational programs for VHS. Funds will be provided out of the budget.

Newsletter: Kelly Geer (in place of Yona) - The committee is working on updating the membership list. Kelly proposed drafting a letter of confirmation for members to provide acknowledgement of the receipt of dues. It was proposed that at the fall meeting ID badges be given to life members of the VHS.

Bylaws: (Erin C. Anthony) No updates. Need to restart meetings this summer

Merchandise Chair: (vacant) Erin had someone to fill the spot and was working with them to review what we had so far, but they moved across the country. Travis suggested not filling the position or having an online store. Merchandise can be created and sold at events. It was agreed upon by the committee that the cost for product versus profit could be kept neutral to get the VHS logo out and awareness of the VHS increased. The main purpose of merchandise is as a form of outreach. There were questions of how payment of merchandise at

events could be handled. Possible solutions other than cash could be Venmo or PayPal. QR codes could be an option to link Venmo or PayPal payments for less tech savvy members. The inventory of merchandise also needs to be tracked.

Legislation: (Larry Mendoza) Not present and no update.

Conservation committee: (Yohn Sutton) A question about creating a tool for box turtle counting was raised. There have been emails from individuals regarding recent counts and the location of the data. It was proposed that a conservation event be held to promote the VHS and sell merchandise for a local conservation cause. This would be similar to how zoos use programs such as “bowling for rhinos” to raise money and awareness for rhino conservation. The event would be determined and voted on at a later date.

Survey committee: (Jason Gibson-not present) Surveys are to be determined at the fall meetings. Jason does not consider this a committee. He runs the HerpBlitz. This may be reestablished as a research committee. HerpBlitzes were created to produce more publications in Catesbeiana, and to have more options for member surveys for attendance.

Catesbeiana: (Paul Sattler-not present) The Catesbeiana spring issue 42 has two major articles, surveys at Ferrum College and Prince William Forest Park, ready to go. There are 26 Field Notes to include as well. All these are already formatted. At the request of several on the Executive Committee, the review policy for

Minutes of Meeting

Catesbeiana has been added to the Instructions to Authors on the Webpage.

Surveys for the Brownsville Preserve, Doe Creek WMA (HerpBlitz), Widewater State Park (Spring Survey), and Lake Anna should be available for the Fall 2022 and Spring 2023 issues, plus any other papers that come in. Data for Field Notes have been coming in regularly, several each week. The data reporting system on the VHS Webpage is working as planned. Observers report the data, and from these data Paul is able to write up numerous Notes that would probably otherwise go unreported. Thank you to Bonnie and John for getting this up and running.

Education committee: (Caroline Seitz) There are new education materials available: 4 new banners, 4 sets of new models for outreach programs, two different logo style stickers, pens, business cards, snake handouts, one cart, and one pop up tent. Ten in-person events were held in 2022. Approximately 2,030 individuals were reached during these programs. Larry Mendoza alone has done six programs (great job!) Travis Anthony, Ana Sparks, and Erin Anthony have also done solo programs. In addition, Ana Sparks did a live presentation online for the Wildlife Center of Virginia on World Turtle Day, reaching an estimated 45,000 individuals online. The event was also featured in a local newspaper, *The Royal Examiner*. There is a need for more “professional” style shirts for programs, more reptile replicas (ie copperhead, timber rattlesnake, local fauna) and educational table displays. The goal is to veer away from using live animals for programs for a multitude of reasons.

A google calendar is up and running, listing all the upcoming events along with details for each event. This has been made available to

all VHS education committee members. Thoughts on creating a toolbox/traveling case for each area of Virginia programs will take place. Along with a county-specific powerpoint. A training outline for programs will be developed as well. More resources are needed towards education, and two or more individuals should sign up for each event. Each event is generally a volunteer event and out of pocket costs can be an issue given certain circumstances. A proposal to ask for donations for programs to offset costs of supplies and transportation to events was made. A proposal to create a budget for travel reimbursement was suggested. It was also suggested a QR code on email links for donations be created.

Treasurer’s report: (Matt Close) See attached treasurer’s report. The goal is to maintain the VHS as a small non-profit organization. Matt raised concerns over PayPal and the process by which the transfer of treasury ownership is handled on the PayPal end. Options to establish a new money program to handle member fee collection (and not rely on personal and sensitive information to create an account) is underway.

Website report: (John White- not present) Erin will rap John’s update. See Erin’s rap.

New business:

An ecotour with Rudee tours was proposed to do a pelagic herping trip for members. It is expensive and there must be a commitment by members to achieve such a tour. There will be a vote on a pelagic trip at the fall meeting.

Travis and Larry recently went to Northwest River Park in Chesapeake, Virginia and suggested a fall survey at this site.

Bookkeeping software for outreach to members: Little Green Light software could be used to assist finding which members have paid and who needs to pay dues. The integration system would cost \$540.00 per year to run. A vote was taken for using funds for software: there was a unanimous vote to approve this expenditure.

Erin proposed the VHS have representation at the NE PARC meeting on August 10 and 11th in West Virginia.

Potential attendance for the national JMIH meeting in Norfolk, Virginia was discussed.

Yohn Sutton
VHS Secretary

Treasurer's Report

A Treasurer's Report was not provided for the Spring Issue of Catesbeiana.

Field Notes

The Field Notes section of *Catesbeiana* provides a means for publishing natural history information on Virginia's amphibians and reptiles that does not lend itself to full-length articles. Observations on geographic distribution, ecology, reproduction, phenology, behavior, and other topics are welcomed. Field Notes will usually concern a single species. The format of the reports is: scientific name (followed by common name in parentheses), state abbreviation (VA), county and location, date(s) of observation, observer(s), data and observations. The name(s) and address(es) of the author(s) should appear one line below the report. Consult the editor if your information does not readily fit this format. **All Field Notes must include a brief statement explaining the significance of the record** (e.g., new county record) **or observation** (e.g., unusual or rarely observed behavior, extremely early or late seasonal record, abnormal coloration, etc.). Submissions that fail to include this information are subject to rejection. Relevant literature should be cited in the body of the text (see Field Notes in this issue for proper format). All submissions will be reviewed by the editor (and one other person if deemed necessary) and revised as needed pending consultation with the author(s).

If the Field Note contains information on a **new county (or state) record, verification is required in the form of a voucher specimen** deposited in a permanent museum (e.g., Virginia Museum of Natural History) or a **photograph** (print, slide, or digital image) **or recording** (cassette tape or digital recording of anuran calls) deposited in the archives of the Virginia Herpetological Society. Photographs and recordings should be sent to the editor for verification and archiving purposes; the identity of voucher specimens must be confirmed by a museum curator or other qualified person. Include the specimen number if it has been catalogued. Prospective authors of distribution reports should consult Mitchell and Reay (1999. *Atlas of Amphibians and Reptiles in Virginia*), Mitchell (1994. *The Reptiles of Virginia*), and Tobey (1985. *Virginia's Amphibians and Reptiles: A Distributional Survey*) [**both atlases are available on-line on the VHS website**] as well as other recent literature to determine if they may have a new county record. New distribution records from large cities that formerly constituted counties (Chesapeake, Hampton, Newport News, Suffolk, and Virginia Beach) are acceptable, but records from smaller cities located within the boundaries of an adjoining county will only be published if the species has not been recorded from that county. Species identification for observational records (e.g., behavior) should be verified by a second person whenever possible.

PHOTOGRAPHS

High contrast photographs (digital images) of amphibians and reptiles will be considered for publication if they are of good quality and are relevant to an accompanying article or field note. Published photographs will be deposited in the Virginia Herpetological Society archives.

Paul Sattler and Matthew Becker Coeditors
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